

20. (Amended) The system of Claim 17 wherein each notification appliance further includes a test status indicator and wherein the activated appliance is programmed to operate the test status indicator in response to the test switch activation for a second test time interval.

21. (Amended) The system of Claim 20 wherein the second message includes an instruction to operate the test status indicator of the activated appliance for a third test time interval.

22. (Amended) The system of Claim 20 wherein the test status indicator comprises an LED indicator.

23. (Amended) The system of Claim 17 wherein each notification appliance further includes a test status indicator and wherein the appliances are programmed to operate the test status indicator at a periodic rate and the activated appliance is further programmed to extinguish the test status indicator in response to the test switch activation.

REMARKS

Claims 1-26 of the present application have been rejected under 35 U.S.C. 102(b) as being anticipated by Wilson et al (Wilson), U.S. Patent No. 5,400,246.

Wilson discloses a monitor and control system with a graphical interface provided on a Macintosh or other PC. The system can monitor various sensors such as smoke detectors, temperature sensors and 2-wire loops which detect open doors and windows. It also controls various alarms, bells and sirens, etc., and can automatically dial-up a telephone number via a modem to send information to a remote location. Fig. 2 and Col. 9, lines 41-68.

Wilson alternatively discloses using X-10 power line communication technology "to monitor and control various household appliances, such as a table lamp, coffee maker, dishwasher, etc." Col. 24, lines 18-30.

The present invention is directed toward a building alarm system having various detectors such as fire detectors, and "[a] number of audible alarms and strobes, generally referred to as notification appliances...." Specification as filed, page 1, lines 1-12. The invention particularly addresses the problem that occurs, for example, during testing of the alarm system. As stated in the specification as filed:

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.... In a conventional system installation, programming can be verified by initiating an alarm input ... to cause an alarm notification through the associated audible and visible notification appliances. A technician can then verify the programming by walking through the building and checking that the appropriate audible and visible notification appliances have been operated. Once the conventional building fire alarm system becomes operational, testing of individual notification appliances is accomplished by causing all of the appliances on a notification circuit to operate, followed again by a technician walking through the building to check that all of the appliances are functioning.

Specification as filed, page 2, lines 14-27.

These conventional methods "can be very disruptive, especially in buildings such as hospitals which do not typically have an unoccupied period during which testing can be performed." Specification as filed, page 3, lines 2-6.

In response to this problem, in the present invention, each notification appliance has "an alarm indicator such as an audible alarm or strobe, and a status indicator, such as an LED. The status indicator provides for system test modes that are not disruptive to building occupants."

Specification as filed, page 3, lines 7-12.

.... To test and verify the programming of the controller, a system test mode is entered at the system controller ... and a technician ... initiates an alarm input at a particular alarm condition detector [T]he alarm input is detected and the system controller selects one or more notification appliances to be operated that correspond to the specific detected alarm input In response, the system controller transmits an LED ON message to the selected notification appliances ... to operate status indicator 120. This then allows the technician to conduct a "silent test" of the appliances without actually sounding the audible indicators or flashing the visible indicators.

Specification as filed, page 9, line 26 to page 10, line 6.

In a troubleshooting process of the present invention, "the system controller ... transmits an LED ON message to the ALL APPLIANCES group address" on a notification appliance circuit suspected of having a faulty appliance. "All of the appliances then operate their respective LED indicators, except for the faulty appliance, which can be visually identified by the technician." Specification as filed, page 10, line 24 to page 11, line 15.

In another embodiment, by providing a magnetic or other locally-activated switch in each notification appliance, a technician may activate one appliance at a time, rather than, as has been the convention, "causing all of the appliances on a notification circuit to operate" while the

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technician walks through the building and checks that all of the appliances are functioning. Specification as filed, page 11, lines 16-20. See Claim 14, for example.

Finally, the LED may indicate, for example, by blinking at a specified periodic rate, whether the respective appliance has already been tested. Specification as filed, page 12, lines 26-33. See Claim 16, for example.

In rejecting Claims 1-26, the Examiner states that "the claimed notification appliances having status and alarm indicators are met by [Wilson's] controlled appliances which status is monitored by the PC...." To support this argument, the Examiner cites Wilson, column 24, lines 18-30. As stated earlier, this passage has to do with the monitoring and controlling of household appliances. However, regardless of exactly which type of equipment is used, Wilson is primarily concerned with monitoring the status of and controlling the equipment, not testing it. See, for example, Column 3, line 35, or Column 4, line 58.

The test status indicator of the present invention is not at a system controller but rather is at the appliance itself to be used to aid a technician during testing and verification of a system, as is the test switch. Neither the cited passage nor any other portion of Wilson refers to a test status indicator or a test switch at an appliance. Wilson simply discloses a monitor and control system using a graphical interface on a computer, in particular inserting an I/O bridge device between the computer and the keyboard. Some testing may be done by simulating inputs with keyboard commands, Column 12, lines 1-25. Wilson does not describe the problem to which the present invention is addressed, namely testing a building alarm system while avoiding disrupting building occupants. Nor does Wilson provide a solution to the problem.

Specifically, Wilson does not disclose a method of "*testing a building alarm system* which comprises the steps of (a) providing plural notification appliances..., *each notification appliance having a test status indicator and an alarm indicator*, (b) selecting at the system controller which notification appliances to operate, and (c) communicating from the system controller to each selected notification appliance *an instruction to operate its associated test status indicator without operating its associated alarm indicator so as to avoid disrupting building occupants.*" See Claim 1 as amended. This argument applies also to system Claim 5 as amended.

Wilson also does not disclose a method of "providing plural notification appliances connected to a system controller, each notification appliance having an alarm indicator and a locally-activated test switch; activating the locally-activated test switch of one of the plural

notification appliances; transmitting a first message from the one activated appliance in response to the test switch activation; and receiving the first message at the system controller and transmitting to the activated appliance a second message instructing the activated appliance to operate its associated alarm indicator for a test time interval." See Claim 14 as amended. This argument applies also to system Claim 17 as amended.

The claims have been amended to clarify that the status indicators are *test* status indicators, and that the locally-activated switches are *test* switches. These components are used in system verification and testing. Although the terms "test status indicator" and "test switch" are not explicitly used in the Specification, Applicants believe such language is supported by the text, and that no new matter is presented by such terms. See, for example, the Specification as filed, page 7, lines 28-29, and page 9, line 26, to page 10, line 11.

Claim 8 has been further amended to correct the typographical error pointed out by the Examiner.

Applicants believe that the claims as amended are not anticipated or suggested by Wilson and respectfully request reconsideration of the rejection of the claims.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (781) 861-6240.

Respectfully submitted,

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